CPC COOPERATIVE PATENT CLASSIFICATION

B03B SEPARATING SOLID MATERIALS USING LIQUIDS OR USING PNEUMATIC TABLES OR JIGS (removing fluids from solids B01D; magnetic or electrostatic separation of solid materials from solid materials or fluids, separation by high voltage electric fields B03C; flotation differential sedimentation B03D; separating by dry methods B07; screening or sifting B07B; by picking B07C; separating peculiar to particular materials and provided for in other single classes, see the relevant classes)

1/00 **Conditioning for facilitating separation by altering physical properties of the matter to be treated** (pre-treatment of ores in general C22B {Pretreatment prior to magnetic separation B03C 1/00})

1/02 . Preparatory heating

1/04 . by additives

1/06 . by varying ambient atmospheric pressure

4/00 **Separating by pneumatic tables or by pneumatic jigs** (sink-float separation using dry heavy media B03B 5/46)

NOTE

Group B03B 4/005 takes precedence over groups B03B 4/02 - B03B 4/065

4/005 . {the currents being pulsating, e.g. pneumatic jigs; combination of continuous and pulsating currents}

4/02 . using swinging or shaking tables

4/04 . using rotary tables or tables formed by travelling belts (separating solids from solids using gas currents and revolving drums B07B 4/06)

4/06 . using fixed and inclined tables; {using stationary pneumatic tables, e.g. fluidised beds}

4/065 . . {having inclined portions}

5/00 **Washing granular, powdered or lumpy materials; Wet separating** (separating by pneumatic tables or by pneumatic jigs B03B 4/00)

5/02 . using shaken, pulsated or stirred beds as the principal means of separation (B03B 5/28, B03B 5/48 take precedence)

5/04 . . on shaking tables (on vanners B03B 5/08)

5/06 . . . Constructional details of shaking tables, e.g. riffling

5/08 . . on vanners

5/10 . . on jigs

5/12 . . . using pulses generated mechanically in fluid

5/14 . . . . Plunger jigs

5/16 . . . . Diaphragm jigs

5/18 . . . . Moving-sieve jigs

5/20 . . . using pulses generated by air injection

5/22 . . . using pulses generated by liquid injection

5/24 . . . Constructional details of jigs, e.g. pulse control devices

5/26 . . in sluices

5/28 . by sink-float separation

5/30 . . using heavy liquids or suspensions

5/32 . . . using centrifugal force (centrifuges B04B; cyclones B04C)

5/34 . . . . Applications of hydrocyclones

5/36 . . . Devices therefor, other than using centrifugal force (jigs B03B 5/10)

5/38 . . . . of conical receptacle type

5/40 . . . . of trough type

2005/405 . . . . . {using horizontal currents}

5/42 . . . . of drum of lifting wheel type

5/44 . . . Application of particular media therefor

5/442 . . . . {composition of heavy media}

5/445 . . . . . {composition of dry heavy media}

5/447 . . . . {recovery of heavy media}

5/46 . . using dry heavy media; Devices therefor

5/48 . by mechanical classifiers (sink-float separation aspects B03B 5/28)

5/50 . . Rake classifiers

5/52 . . Spiral classifiers

5/54 . . Drag classifiers

5/56 . . Drum classifiers

5/58 . . Bowl classifiers

5/60 . by non-mechanical classifiers, e.g. slime tanks (using shaken, pulsated or stirred beds as the principal means of separation B03B 5/02; hydraulic classifiers B03B 5/62; water impulse classifiers B03B 5/68)

5/62 . by hydraulic classifiers, e.g. of launder, tank, spiral or helical chute concentrator type

5/623 . . {Upward current classifiers}

5/626 . . {Helical separators}

5/64 . . of the free settling type

5/66 . . of the hindered settling type

5/68 . by water impulse (shaking tables B03B 5/04; jigs B03B 5/10; hydraulic classifiers B03B 5/62)

5/70 . . on tables or strakes

5/72 . . . which are movable

5/74 . . . . Revolving tables

7/00 **Combinations of wet processes or apparatus with other processes or apparatus, e.g. for dressing ores or garbage**

9/00 **General arrangement of separating plant, e.g. flow sheets**

9/005 . {specially adapted for coal}

9/02 . specially adapted for oil-sand, oil-chalk, oil-shales, ozokerite, bitumen, or the like

9/04 . specially adapted for furnace residues, smeltings, or foundry slags

9/06 . specially adapted for refuse

9/061 . . {the refuse being industrial}

9/062 . . . {the refuse being glass}

9/063 . . . {the refuse being concrete slurry}

9/065 . . . {the refuse being building rubble}

2009/066 . . {the refuse being batteries}
2009/067 . . {the refuse being carpets}
2009/068 . . {Specific treatment of shredder light fraction}

11/00 **Feed or discharge devices integral with washing or wet-separating equipment** (filling or emptying devices per se B65G 65/30)
2011/002 . {Rotary feeding devices}
2011/004 . {Lifting wheel dischargers}
2011/006 . {Scraper dischargers}
2011/008 . {Screw dischargers}

13/00 **Control arrangements specially adapted for wet-separating apparatus or for dressing plant, using physical effects** (detecting, measuring, or analysing devices G01; control devices in general G05)
13/005 . {Methods or arrangements for controlling the physical properties of heavy media (in relation with groups B03B 5/30 - B03B 5/46), e.g. density, concentration, viscosity}
13/02 . using optical effects
13/04 . using electrical or electromagnetic effects
13/06 . using absorption or reflection of radioactive emanation